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FERTILIZER REPORT

FOR THE YEAR
1950

Commonwealth of Pennsylvania

HON. JOHN S. FINE, Governor

Department of Agriculture

HON. MILES HORST, Secretary

Harrisburg



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Pennsylvania Department of Agriculture
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Fertilizer Report—1950

Introduction

All products intended for fertilizing purposes, except the dung of domestic animals, marl, lime, and wood ashes, shall be registered annually in accordance with the provisions of the Pennsylvania Fertilizer Law, Act of May 1, 1909, as amended.

Section 1 requires the following information to be shown on sacks or attached cards: (a) The number of pounds of fertilizer contained in the package; (b) the name, brand, or trade mark under which the fertilizer is sold; (c) the name and principal address of the manufacturer, importer, or other person putting the fertilizer on the market in this Commonwealth; (d) guarantee for nitrogen; (e) guarantee for total phosphoric acid, except in mixed or super-phosphate fertilizer; (f) guarantee for available phosphoric acid; (g) guarantee for potash soluble in distilled water.

Mixed fertilizer shall contain at least sixteen units of plant food based upon guarantees for nitrogen, available phosphoric acid, and water soluble potash, the guarantees to be stated in even units.

The Law requires that when the word "tobacco" is used as a part of the brand name, the potash content must be in a form other than chloride.

Applications for registration are submitted to each previous licensee toward the close of the calendar year. The application must show the preceding year's tonnage sales of each brand in order that license or registration fee can be properly computed. It must also show the names and number of brands to be sold during the ensuing year, and state the analysis of each one of such brands.

Agents of the Bureau of Foods and Chemistry are empowered to collect samples of commercial fertilizers, at which time reports providing full information for each sample are prepared. The samples and reports are forwarded direct to the Harrisburg Laboratory where an immediate check of the record is effected to determine the registration status. Analyses are then performed to ascertain whether the fertilizers conform to their guarantees.

During the year 1950, Agents of the Department collected 544 official samples. Of this number, a total of 540, representing 250 brands registered by 40 manufacturers, were subjected to analysis and classified as follows:

	<i>Brands</i>	<i>Samples</i>
Complete Fertilizers	181	419
Ground Bone Fertilizers	5	5
Superphosphate Fertilizers	29	63
Rock and Potash Fertilizers	28	41
Miscellaneous Fertilizers	7	12
Totals	250	540

Requirements for Registration According to Pennsylvania FERTILIZER LAW

Section 2. Each manufacturer or importer of commercial fertilizer . . . shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture a statement of the names and number of brands of such commercial fertilizers, having distinct trade-names, that he shall offer for sale during the next ensuing year, and a copy of the analysis of each one of such brands of commercial fertilizer . . .

Section 3. In addition . . . every manufacturer or importer of commercial fertilizers shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture an affidavit showing the amount of each brand of fertilizer, having a distinct trade-name, sold within the Commonwealth during the last preceding year; and if the said amount shall be one hundred and fifty tons or less, he or they shall pay or cause to be paid to the Secretary of Agriculture the sum of fifteen dollars for each and every brand of such commercial fertilizer, having a distinct trade-name, sold within the State during the last preceding year; and if the said amount shall exceed one hundred and fifty tons, and be not more than two hundred and fifty tons, he or they shall pay the sum of twenty dollars, as aforesaid; if the said amount shall exceed two hundred and fifty tons, and not more than four hundred tons, he or they shall pay the sum of thirty dollars; if the amount shall exceed four hundred tons, and not more than five hundred tons, he or they shall pay forty dollars; and if the amount shall exceed five hundred tons, he or they shall pay fifty dollars. If such manufacturer or manufacturers, importer or importers, shall not have made any sales within the Commonwealth during the preceding year, he or they shall pay the sum of fifteen dollars upon each such brand as aforesaid.

Section 5. Any person or persons selling, offering, or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name, without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense. . . .—*Act of May 1, 1909, P. L. 344 as amended.*

The Department of Agriculture, as the agency charged by the Legislature with enforcement of the provisions of the Fertilizer Law (copies of which are available upon request) insists upon strict compliance therewith.

Brands Registered and Tonnage Sales

Licenses were issued to 111 Manufacturers to cover sales of their brands for the year 1950. These licenses included 672 brands of which 566 were mixed fertilizers and 107 so-called "base" materials such as nitrate of soda, sulphate of ammonia, bone, etc.

The 1950 applications for registration showed that 622,190 tons of all classes of fertilizers were sold during the year 1949 compared with 563,939 tons sold during 1948 and classified as follows: Complete Fertilizers, 493,737 tons; Ground Bone Fertilizers, 1,192 tons; Superphosphate Fertilizers, 87,548 tons; Rock and Potash Fertilizers, 25,136 tons; and Miscellaneous Fertilizers as follows: Tankage, 745 tons; Nitrate of Soda, 341 tons; Potash Salts, 174 tons; Sulphate of Ammonia, 188 tons; and unclassified, 10,492 tons.

The 1949 tonnage figure reveals that there were supplied 13,993 tons of nitrogen, 56,873 tons of available phosphoric acid, and 35,014 tons of water soluble potash, or a total of 110,880 tons of plant food. The amount of plant food is 10,492 tons more than that supplied during the year 1948.

Conclusions

Of the 540 official samples analyzed, 63 or 11.66 per cent were found to be deficient in one or more elements of plant food, to the extent of 0.2 per cent or more. The proportion of deficiencies is lower than that reported for the year 1949.

Considering the plant food elements separately, 20 samples or 3.70 per cent were found to be deficient in nitrogen; 18 or 3.33 per cent deficient in phosphoric acid; and 25 or 4.63 per cent deficient in water soluble potash.

Of the total number of fertilizers analyzed, 419 were complete fertilizers and 44 or 10.50 per cent were found to be deficient: 19 or 4.53 per cent deficient in nitrogen; 8 or 1.90 per cent in available phosphoric acid; 17 or 4.05 per cent in water soluble potash.

Average Analyses and Retail Prices

The average unit values, estimated from the average retail selling prices, were as follows: Nitrogen \$4.19, Available Phosphoric Acid \$1.42, Water Soluble Potash \$1.61.

The average retail selling price for Complete Fertilizers in 1950 was \$48.62 a ton, compared with \$48.36 for 1949.

It is noted that 11.66 per cent of all samples collected during the year 1950 were found to be deficient, which deficiency is lower than the previous year's inspection. In most instances the deficiencies were balanced by overages in other elements. Where the deficiencies were found to be of serious nature, prosecutions were instituted.

Key to Tables

The following tables include the results of analyses of the official samples. Each sample was given a chemist's number and analyzed for the element or elements guaranteed.

The Asterisk (*) indicates those samples found to be deficient to the extent of 0.2 per cent or more.

Table I—Deficiencies.

Table II—Average Analyses and Retail Prices.

Table III—Complete Fertilizer, furnishing Nitrogen, Available Phosphoric Acid and Potash.

Table IV—Ground Bone Fertilizers, furnishing Nitrogen, and Total Phosphoric Acid.

Table V—Superphosphate and Lime Phosphate Fertilizers furnishing Available Phosphoric Acid.

Table VI—Rock and Potash Fertilizers furnishing Available Phosphoric Acid and Potash.

Table VII—Miscellaneous Fertilizers, including Nitrate of Soda and Sulphate of Ammonia.

TABLE I. DEFICIENCIES

CLASS OF FERTILIZERS	SAMPLES	NITROGEN	Number Deficient in	
			AVAILABLE PHOSPHORIC ACID	POTASH
Complete Fertilizers	419	19	8	17
Ground Bone Fertilizers	5	0	1	0
Superphosphate Fertilizers	63	0	0	0
Rock and Potash Fertilizers	41	0	9	8
Miscellaneous	12	1	0	0
Total	540	20	18	25

TABLE II. AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	COMPLETE FERTILIZERS	GROUND BONE FERTILIZERS	SUPER- PHOSPHATE FERTILIZERS*	ROCK AND POTASH FERTILIZERS	MISCEL- LANEOUS
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen	4.62	3.10	17.32
Available Phosphoric Acid	11.96	21.93	20.66	16.73	3.96
Potash	7.61	13.99
Selling Price 1950	\$48.62	\$87.78	\$30.49	\$46.29	\$72.50
Selling Price 1949	\$48.36	\$87.92	\$30.87	\$40.41	\$77.04

* Excluding Lime Phosphate

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Multrate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.									
AA Quality Fertilizer	3-12-6	(71)	4.02	3.00	12.28	12.00	5.82	6.00	----
AA Quality Fertilizer	3-12-6	(124)	3.02	3.00	12.46	12.00	6.87	6.00	----
AA Quality Fertilizer	3-12-6	(337)	3.09	3.00	12.12	12.00	6.17	6.00	----
AA Quality Fertilizer	3-12-6	(340)	2.85	3.00	13.06	12.00	5.87	6.00	----
AA Quality Fertilizer	3-12-6	(422)	2.81	3.00	11.88	12.00	6.31	6.00	----
AA Quality Fertilizer	5-10-5	(126)	4.89	5.00	10.62	10.00	5.63	5.00	----
Agrico for Broadleaf Evergreens	6-10-4	(266)	6.07	6.00	10.60	10.00	4.19	4.00	----
Agrico Country Club	6-10-4	(270)	6.01	6.00	10.44	10.00	4.28	4.00	----
Agrico for Cereals	4-12-4	(275)	3.87	4.00	12.00	12.00	4.85	4.00	----
Agrico for Cereals	4-12-4	(439)	4.14	4.00	12.52	12.00	4.50	4.00	----
Agrico for Commercial Growers	4-12-4	(267)	4.52	4.00	13.00	12.00	4.28	4.00	----
Agrico for Corn	3-12-6	(32)	3.01	3.00	12.84	12.00	5.95	6.00	----
Agrico for Corn	3-12-6	(282)	3.02	3.00	11.84	12.00	6.44	6.00	----
Agrico for Corn	3-12-6	(314)	3.12	3.00	12.72	12.00	6.16	6.00	----
Agrico for Corn	3-12-6	(368)	3.06	3.00	12.04	12.00	5.92	6.00	----
Agrico for Corn	3-12-6	(438)	3.01	3.00	12.02	12.00	6.26	6.00	----
Agrico for Corn	3-12-6	(478)	3.03	3.00	12.16	12.00	6.43	6.00	----
Agrico for Corn	3-12-6	(515)	3.01	3.00	12.38	12.00	6.37	6.00	----
Agrico for Fruit	10-6-4	(277)	10.22	10.00	6.56	6.00	4.19	4.00	----
Agrico for Fruit	10-6-4	(477)	9.81	10.00	6.88	6.00	4.01	4.00	----
Agrico for Gardens	5-10-5	(271)	5.20	5.00	10.66	10.00	5.16	5.00	----
Agrico for Gardens	5-10-5	(315)	5.22	5.00	10.66	10.00	5.39	5.00	----
Agrico for Gardens	5-10-5	(332)	4.83	5.00	10.32	10.00	5.74	5.00	----
Agrico for Gardens	5-10-5	(341)	5.12	5.00	10.08	10.00	5.97	5.00	----
Agrico for Gardens	5-10-5	(389)	5.02	5.00	10.62	10.00	5.12	5.00	----
Agrico for Grain	3-12-6	(272)	3.27	3.00	12.00	12.00	6.22	6.00	----
Agrico for Grain	3-12-6	(283)	2.81	3.00	12.40	12.00	6.51	6.00	----
Agrico for Grain	3-12-6	(474)	3.01	3.00	11.94	12.00	6.51	6.00	----
Agrico for Lawns, Trees & Shrubs	6-10-4	(268)	6.36	6.00	10.34	10.00	4.42	4.00	----
Agrico for Lawns, Trees & Shrubs	6-10-4	(342)	6.14	6.00	10.52	10.00	3.88	4.00	----
Agrico for Lawns, Trees & Shrubs	6-10-4	(403)	6.37	6.00	10.86	10.00	4.47	4.00	----
Agrico for Potatoes	4-12-8	(151)	4.13	4.00	12.88	12.00	8.45	8.00	----
Agrico for Potatoes	4-12-8	(274)	4.23	4.00	12.20	12.00	8.69	8.00	----
Agrico for Potatoes	4-12-8	(278)	4.20	4.00	12.18	12.00	8.76	8.00	----
Agrico for Potatoes	4-12-8	(369)	4.39	4.00	12.24	12.00	8.19	8.00	----
Agrico for Potatoes	4-12-8	(391)	4.03	4.00	11.84	12.00	8.42	8.00	----
Agrico for Potatoes	4-12-8	(476)	4.21	4.00	11.98	12.00	8.81	8.00	----
Agrico for Potatoes	4-12-12	(544)	3.86	4.00	12.30	12.00	12.56	12.00	----
Agrico for Potatoes	5-10-10	(338)	5.00	5.00	10.70	10.00	9.98	10.00	----
Agrico for Tomatoes	4-12-8	(281)	4.38	4.00	12.02	12.00	8.80	8.00	----
Agrico for Top Dressing	7-7-7	(276)	*6.01	7.00	8.44	7.00	6.88	7.00	----
Agrico for Truck	5-10-5	(264)	*4.59	5.00	11.16	10.00	*4.51	5.00	----
Agrico for Truck	5-10-5	(269)	5.09	5.00	10.08	10.00	5.00	5.00	----
Agrico for Truck	5-10-5	(421)	4.83	5.00	10.44	10.00	5.30	5.00	----
Agrico for Truck	5-10-5	(440)	4.81	5.00	10.40	10.00	4.93	5.00	----
Agrico for Truck	5-10-5	(475)	5.32	5.00	10.12	10.00	4.91	5.00	----
Agrico for Truck	5-10-10	(290)	5.02	5.00	10.74	10.00	10.05	10.00	----
ARMOUR FERTILIZER WORKS Baltimore, Md.									
Armour's Big Crop	3-12-6	(27)	3.33	3.00	12.56	12.00	6.32	6.00	----
Armour's Big Crop	3-12-6	(83)	3.26	3.00	13.16	12.00	6.42	6.00	----
Armour's Big Crop	3-12-6	(161)	3.26	3.00	12.60	12.00	6.14	6.00	----
Armour's Big Crop	3-12-6	(313)	3.59	3.00	12.16	12.00	6.32	6.00	----
Armour's Big Crop	3-12-6	(416)	3.21	3.00	13.04	12.00	6.09	6.00	----
Armour's Big Crop	3-12-6	(442)	3.39	3.00	13.38	12.00	6.10	6.00	----
Armour's Big Crop	3-12-6	(499)	3.27	3.00	13.60	12.00	6.19	6.00	----
Armour's Big Crop	3-12-6	(528)	3.33	3.00	12.94	12.00	5.85	6.00	----
Armour's Big Crop	3-12-6	(541)	3.20	3.00	12.54	12.00	6.09	6.00	----
Armour's Big Crop	4-12-4	(503)	4.25	4.00	12.78	12.00	4.51	4.00	----
Armour's Big Crop	4-12-8	(175)	4.18	4.00	12.98	12.00	7.97	8.00	----
Armour's Big Crop	4-12-8	(502)	4.20	4.00	12.96	12.00	8.81	8.00	----
Armour's Big Crop	4-16-8	(197)	4.37	4.00	17.22	16.00	8.77	8.00	----
Armour's Big Crop	5-10-5	(177)	5.13	5.00	11.24	10.00	5.91	5.00	----
Armour's Big Crop	5-10-5	(418)	5.07	5.00	10.92	10.00	5.39	5.00	----
Armour's Big Crop	5-10-5	(463)	5.01	5.00	11.62	10.00	6.10	5.00	----
Armour's Big Crop	5-10-5	(540)	5.02	5.00	10.82	10.00	5.33	5.00	----
Armour's Big Crop	5-10-10	(28)	5.42	5.00	10.58	10.00	9.97	10.00	----
Armour's Big Crop	5-10-10	(84)	5.13	5.00	10.66	10.00	10.46	10.00	----
Armour's Big Crop	5-10-10	(160)	4.84	5.00	11.60	10.00	9.89	10.00	----
Armour's Big Crop	5-10-10	(443)	5.25	5.00	11.32	10.00	9.90	10.00	----
Armour's Big Crop	5-10-10	(500)	5.37	5.00	10.74	10.00	10.42	10.00	----
Armour's Big Crop	5-10-10	(539)	5.01	5.00	11.40	10.00	10.58	10.00	----
Armour's Big Crop	8-8-8	(441)	*7.32	8.00	9.92	8.00	7.80	8.00	----
Armour's Big Crop	10-10-10	(176)	9.82	10.00	11.72	10.00	9.93	10.00	----
Armour Vertagreen	5-10-5	(85)	5.08	5.00	10.84	10.00	5.15	5.00	----
Armour Vertagreen	5-10-5	(198)	5.41	5.00	11.38	10.00	6.00	5.00	----
Armour Vertagreen	5-10-5	(253)	5.44	5.00	11.24	10.00	5.72	5.00	----
Armour Vertagreen	5-10-5	(487)	5.39	5.00	11.16	10.00	5.62	5.00	----
BAUGH & SONS COMPANY Philadelphia, Pa.									
Baugh's	5-10-10	(113)	5.05	5.00	10.62	10.00	10.12	10.00	----
Baugh's	5-10-10	(152)	5.24	5.00	10.86	10.00	10.53	10.00	----
Baugh's	5-10-10	(346)	5.14	5.00	10.52	10.00	10.17	10.00	----
Baugh's	5-10-10	(467)	5.08	5.00	10.60	10.00	10.13	10.00	----
Baugh's Balanced Plant Food	4-12-4	(459)	3.87	4.00	12.72	12.00	4.33	4.00	----

* Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH	
			Found	Guar.	Found	Guar.	Found	As Muirate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Baugh's Century Plant Food	4-12-8 (109)		3.82	4.00	12.92	12.00	8.09	8.00
Baugh's Century Plant Food	4-12-8 (243)		4.17	4.00	12.68	12.00	8.96	8.00
Baugh's Century Plant Food	4-12-8 (462)		4.02	4.00	12.48	12.00	8.34	8.00
Baugh's Double Eagle Phosphate	3-12-6 (107)		3.09	3.00	12.58	12.00	6.27	6.00
Baugh's Double Eagle Phosphate	3-12-6 (248)		3.17	3.00	12.78	12.00	6.27	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (19)		3.03	3.00	12.82	12.00	6.32	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (69)		3.15	3.00	12.38	12.00	6.34	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (110)		3.13	3.00	12.62	12.00	5.91	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (145)		3.02	3.00	13.56	12.00	6.17	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (178)		3.18	3.00	13.10	12.00	6.32	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (240)		3.16	3.00	13.04	12.00	6.69	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (303)		3.33	3.00	13.26	12.00	6.95	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (336)		3.18	3.00	12.96	12.00	6.28	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (345)		3.18	3.00	13.10	12.00	6.50	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (374)		3.19	3.00	12.66	12.00	6.43	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (460)		3.31	3.00	12.70	12.00	7.09	6.00
Baugh's Premium Plant Food & Soil Builder	3-12-6 (513)		3.20	3.00	12.44	12.00	6.75	6.00
Baugh's Premium Plant Food & Soil Builder	4-12-12 (105)		4.01	4.00	12.92	12.00	11.88	12.00
Baugh's Premium Plant Food & Soil Builder	4-12-12 (244)		4.04	4.00	13.26	12.00	*11.47	12.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (111)		5.08	5.00	10.84	10.00	4.92	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (147)		4.85	5.00	10.80	10.00	5.62	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (304)		5.01	5.00	10.64	10.00	5.52	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (375)		5.21	5.00	11.42	10.00	5.14	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (383)		5.02	5.00	11.30	10.00	6.56	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (405)		4.82	5.00	11.20	10.00	6.90	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (419)		5.02	5.00	10.52	10.00	5.35	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-5 (461)		5.01	5.00	10.80	10.00	5.02	5.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (20)		5.16	5.00	10.52	10.00	10.04	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (68)		5.09	5.00	10.68	10.00	10.10	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (104)		4.82	5.00	11.72	10.00	10.17	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (242)		5.21	5.00	11.28	10.00	10.25	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (247)		5.00	5.00	11.48	10.00	10.00	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (298)		5.09	5.00	11.22	10.00	9.80	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (379)		5.01	5.00	10.94	10.00	10.08	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (382)		4.80	5.00	10.94	10.00	10.14	10.00
Baugh's Premium Plant Food & Soil Builder	5-10-10 (514)		5.14	5.00	10.42	10.00	10.58	10.00
Baugh's Premium Plant Food & Soil Builder	7-7-7 (112)		7.00	7.00	7.96	7.00	6.81	7.00
Baugh's Tree Food & Side Dresser	10-10-10 (103)		9.81	10.00	10.86	10.00	10.16	10.00
Baugh's Truckers Favorite	5-10-5 (106)		*4.69	5.00	11.36	10.00	5.66	5.00
Baugh's Truckers Favorite	5-10-5 (241)		5.01	5.00	10.72	10.00	5.04	5.00
CARLISLE FERTILIZER WORKS, INC. Carlisle, Pa.								
Carlisle	3-12-6 (323)		3.52	3.00	12.38	12.00	7.69	6.00
Carlisle	5-10-10 (322)		4.82	5.00	10.58	10.00	*9.35	10.00
CENTRAL CHEMICAL CORPORATION Hagerstown, Md.								
Farmrite Famous Corn Food	3-12-6 (206)		3.43	3.00	12.26	12.00	7.72	6.00
Farmrite Famous Fruit Food	10-6-4 (208)		9.82	10.00	7.00	6.00	4.67	4.00
Farmrite Famous Old Fish Brand	3-12-6 (45)		3.04	3.00	*11.70	12.00	*5.69	6.00
Farmrite Famous Potato Food	4-12-12 (293)		4.14	4.00	12.26	12.00	11.88	12.00
Farmrite Famous Potato Food	5-10-10 (117)		*4.69	5.00	10.46	10.00	11.43	10.00
Farmrite Famous Potato Food	5-10-10 (187)		5.02	5.00	11.12	10.00	11.12	10.00
*—Deficient								

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME				NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
				Found	Guar.	Found	Guar.	Found	Guar.	As Muirate
				P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Farmrite Famous Tometo Food	4-12-8 (115)			3.81	4.00	12.38	12.00	8.49	8.00	----
Farmrite Farmers Favorite	4-12-4 (47)			4.49	4.00	*11.70	12.00	4.30	4.00	----
Farmrite Farmers Favorite	4-12-4 (207)			3.80	4.00	12.30	12.00	4.43	4.00	----
Farmrite Farmers Favorite	4-12-4 (491)			*3.65	4.00	12.12	12.00	4.95	4.00	----
Farmrite Fertilizer	5-10-10 (296)			4.86	5.00	10.00	10.00	9.86	10.00	----
Farmrite Fertilizer	5-10-10 (489)			*4.27	5.00	11.92	10.00	10.10	10.00	----
Farmrite Fertilizer	10-6-4 (495)			*8.06	10.00	7.72	6.00	4.31	4.00	----
Farmrite Golden Grain	3-12-6 (39)			3.31	3.00	12.10	12.00	6.59	6.00	----
Farmrite Golden Grain	3-12-6 (116)			3.23	3.00	12.14	12.00	5.91	6.00	----
Farmrite Golden Grain	3-12-6 (188)			3.21	3.00	12.82	12.00	6.74	6.00	----
Farmrite Golden Grain	3-12-6 (297)			3.20	3.00	11.88	12.00	6.75	6.00	----
Farmrite Golden Grain	3-12-6 (472)			3.30	3.00	11.82	12.00	6.56	6.00	----
Farmrite Golden Grain	3-12-6 (488)			3.91	3.00	*10.44	12.00	*5.38	6.00	----
Farmrite Golden Grain	3-12-6 (492)			3.14	3.00	12.04	12.00	6.16	6.00	----
Farmrite Truck Special	5-10-5 (186)			4.81	5.00	10.56	10.00	5.10	5.00	----
Farmrite Truck Special	5-10-5 (295)			4.86	5.00	10.48	10.00	5.62	5.00	----
Farmrite Truck Special	5-10-5 (398)			5.07	5.00	10.06	10.00	5.00	5.00	----
CENTRAL CHEMICAL CORPORATION Lebanon, Pa.										
Farmrite Gardenrite	5-10-5 (9)			4.81	5.00	10.88	10.00	5.65	5.00	----
CUMBERLAND VALLEY COOPERATIVE ASSN. Shippensburg, Pa.										
Old Reliable	3-12-6 (44)			*2.36	3.00	13.94	12.00	5.94	6.00	----
Old Reliable	3-12-6 (335)			*2.59	3.00	12.68	12.00	6.41	6.00	----
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.										
Davco Granulated Alfalfa Special with Borax	2-12-12 (329)			2.33	2.00	12.14	12.00	*10.82	12.00	----
Davco Granulated	3-12-6 (128)			3.12	3.00	12.02	12.00	*5.36	6.00	----
Davco Granulated	3-12-6 (192)			3.18	3.00	13.20	12.00	6.32	6.00	----
Davco Granulated	3-12-6 (257)			3.35	3.00	12.72	12.00	6.60	6.00	----
Davco Granulated	3-12-6 (356)			3.24	3.00	13.00	12.00	6.47	6.00	----
Davco Granulated	3-12-6 (485)			3.24	3.00	12.48	12.00	6.01	6.00	----
Davco Granulated	3-12-6 (506)			3.15	3.00	12.62	12.00	8.09	6.00	----
Davco Granulated	4-12-4 (127)			4.13	4.00	12.04	12.00	4.17	4.00	----
Davco Granulated	4-12-4 (138)			3.92	4.00	12.22	12.00	4.04	4.00	----
Davco Granulated	4-12-4 (255)			4.43	4.00	13.48	12.00	4.01	4.00	----
Davco Granulated	4-12-4 (305)			3.93	4.00	11.88	12.00	3.90	4.00	----
Davco Granulated	4-12-4 (483)			3.81	4.00	12.86	12.00	*3.68	4.00	----
Davco Granulated	4-12-8 (191)			3.88	4.00	12.48	12.00	7.81	8.00	----
Davco Granulated	4-12-8 (256)			4.16	4.00	12.82	12.00	9.19	8.00	----
Davco Granulated	4-12-8 (330)			3.90	4.00	11.84	12.00	7.93	8.00	----
Davco Granulated	4-12-9 (354)			4.19	4.00	12.38	12.00	8.13	8.00	----
Davco Granulated	4-12-8 (484)			3.91	4.00	12.54	12.00	7.82	8.00	----
Davco Granulated	5-10-5 (258)			5.50	5.00	11.20	10.00	5.40	5.00	----
Davco Granulated	5-10-10 (193)			4.85	5.00	10.70	10.00	10.37	10.00	----
Davco Granulated	5-10-10 (353)			5.21	5.00	10.36	10.00	10.33	10.00	----
Davco Granulated	5-10-10 (504)			5.05	5.00	11.16	10.00	10.26	10.00	----
Davco Granulated Fertilizer for the Home	5-10-5 (137)			5.16	5.00	10.00	10.00	5.10	5.00	----
Davco Granulated Potato Special (2% MgO)	5-10-10 (136)			5.55	5.00	10.12	10.00	10.34	10.00	----
Davco Granulated Potato Special (2% MgO)	5-10-10 (195)			5.09	5.00	10.78	10.00	10.37	10.00	----
Old Reliable	3-12-6 (310)			3.30	3.00	12.46	12.00	5.82	6.00	----
Old Reliable	4-12-4 (509)			3.88	4.00	12.38	12.00	4.69	4.00	----
Old Reliable	4-12-8 (311)			4.00	4.00	12.58	12.00	8.37	8.00	----
Old Reliable	4-12-8 (507)			4.04	4.00	12.12	12.00	8.09	8.00	----
EASTERN STATES FARMERS' EXCHANGE INCORPORATED West Springfield, Mass.										
Eastern States	3-12-6 (15)			3.14	3.00	12.78	12.00	6.52	6.00	----
Eastern States	3-12-6 (53)			3.09	3.00	12.78	12.00	6.67	6.00	----
Eastern States	3-12-6 (300)			3.32	3.00	12.82	12.00	6.48	6.00	----
Eastern States	3-12-6 (325)			3.08	3.00	13.28	12.00	6.73	6.00	----
Eastern States	3-12-6 (423)			3.22	3.00	13.24	12.00	6.95	6.00	----
Eastern States	5-10-10 (14)			5.01	5.00	10.40	10.00	9.91	10.00	----
Eastern States	5-10-10 (212)			5.13	5.00	11.80	10.00	10.51	10.00	----
Eastern States	5-10-10 (327)			5.04	5.00	11.52	10.00	10.18	10.00	----
Eastern States	5-10-10 (424)			5.08	5.00	11.00	10.00	10.73	10.00	----
Eastern States	5-15-15 (65)			5.01	5.00	15.38	15.00	15.73	15.00	----
Eastern States	5-15-15 (516)			4.90	5.00	15.14	15.00	16.81	15.00	----
Eastern States	5-20-10 (8)			5.11	5.00	*18.42	20.00	11.05	10.00	----
Eastern States	5-20-10 (66)			5.35	5.00	20.02	20.00	11.22	10.00	----
Eastern States	5-20-10 (142)			5.01	5.00	*19.08	20.00	11.23	10.00	----
Eastern States	5-20-10 (326)			5.01	5.00	20.28	20.00	11.24	10.00	----
Eastern States	5-20-10 (426)			4.81	5.00	19.94	20.00	12.52	10.00	----
Eastern States	5-20-10 (517)			5.38	5.00	20.90	20.00	11.45	10.00	----
Eastern States	8-16-16 (13)			*7.49	8.00	16.74	16.00	16.35	16.00	----
Eastern States	8-16-16 (67)			7.89	8.00	17.64	16.00	16.67	16.00	----
Eastern States	8-16-16 (299)			7.81	8.00	18.50	16.00	16.22	16.00	----
Eastern States	8-16-16 (328)			8.00	8.00	16.54	16.00	17.83	16.00	----
ERIE REDUCTION COMPANY Erie, Pa.										
Erie All Crop	3-12-6 (448)			4.20	3.00	12.40	12.00	8.57	6.00	----
FAESY & BESTROFF, INC. New York, N. Y.										
F & B High Organic Pelletized All-Purpose	6-12-6 (471)			6.36	6.00	12.00	12.00	5.96	6.00	----

* Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME		NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
		Found	Guar.	Found	Guar.	Found	Guar.	As Muirate
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
FRUIT GROWERS OF CHESTER COUNTY West Chester, Pe.								
Famous Tree Food	10-6-4 (10)	9.88	10.00	7.38	6.00	4.24	4.00	----
G.L.F. SOIL BUILDING SERVICE Ithaca, N. Y.								
G.L.F. Quality Groleaf	5-10-5 (407)	4.90	5.00	11.08	10.00	5.70	5.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	3-12-6 (452)	3.54	3.00	14.16	12.00	6.98	6.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	4-12-4 (408)	3.81	4.00	12.02	12.00	4.06	4.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	4-12-8 (370)	4.35	4.00	12.08	12.00	8.62	8.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	4-12-12 (409)	4.36	4.00	12.68	12.00	12.64	12.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	5-10-5 (451)	5.01	5.00	11.54	10.00	5.51	5.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	5-10-10 (387)	5.44	5.00	10.78	10.00	10.83	10.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	5-10-10 (411)	5.29	5.00	10.52	10.00	10.72	10.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	5-10-10 (453)	4.81	5.00	10.54	10.00	11.07	10.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	6-12-6 (367)	6.17	6.00	12.94	12.00	6.45	6.00	----
G.L.F. Quality Open	Formule							
G.L.F. Quality Open	6-12-6 (386)	6.10	6.00	13.22	12.00	6.50	6.00	----
GOULARD & OLENA, INC. Skillman, N. J.								
G & O Lawn & Garden	5-10-5 (392)	5.69	5.00	11.18	10.00	5.04	5.00	----
A. D. GRAHAM & COMPANY, INC. Somerset, Pe.								
Beever Brand	3-12-6 (129)	3.02	3.00	12.62	12.00	6.54	6.00	----
Beever Brand	4-12-4 (130)	4.31	4.00	12.50	12.00	4.41	4.00	----
Beever Brand	5-10-10 (131)	5.34	5.00	10.52	10.00	10.80	10.00	----
GRIFFITH & BOYD COMPANY Baltimore, Md.								
Griffith & Boyd's								
Champion	4-12-12 (249)	4.10	4.00	12.38	12.00	*11.66	12.00	----
Griffith & Boyd's Double								
Strength Guano	8-16-16 (123)	7.82	8.00	16.16	16.00	16.67	16.00	----
Griffith & Boyd's Farmers								
Queen	5-10-10 (427)	5.23	5.00	10.88	10.00	10.58	10.00	----
Griffith & Boyd's High								
Grede Truck Guano	4-12-8 (121)	4.36	4.00	11.92	12.00	8.80	8.00	----
Griffith & Boyd's Nitro								
Crop Feeder	10-6-4 (120)	9.89	10.00	6.98	6.00	3.95	4.00	----
Griffith & Boyd's Nitro								
Crop Feeder	10-6-4 (428)	9.81	10.00	6.86	6.00	4.04	4.00	----
Griffith & Boyd's Planters								
Pride	3-12-6 (251)	3.38	3.00	12.48	12.00	6.61	6.00	----
Griffith & Boyd's Planters								
Pride	3-12-6 (429)	3.20	3.00	13.94	12.00	6.03	6.00	----
Griffith & Boyd's Special								
Fish Guano Brand	3-12-6 (430)	3.24	3.00	12.68	12.00	6.46	6.00	----
Griffith & Boyd's Truck								
Poteto Special	5-10-5 (122)	5.11	5.00	10.00	10.00	5.59	5.00	----
Griffith & Boyd's Truck								
Poteto Special	5-10-5 (250)	5.03	5.00	11.08	10.00	5.65	5.00	----
Griffith & Boyd's Truck								
Poteto Special	5-10-5 (431)	5.12	5.00	10.54	10.00	5.41	5.00	----
INDEPENDENT MANUFACTURING COMPANY Philadelphia, Pe.								
Independent's Consumer	3-12-6 (157)	3.39	3.00	12.56	12.00	6.71	6.00	----
Independent's Consumer	3-12-6 (223)	3.60	3.00	13.22	12.00	6.88	6.00	----
Independent's Consumer	4-12-12 (234)	3.81	4.00	12.30	12.00	12.48	12.00	----
Independent's Consumer	5-10-5 (221)	4.82	5.00	10.70	10.00	5.51	5.00	----
Independent's Consumer	5-10-10 (233)	5.47	5.00	10.70	10.00	10.19	10.00	----
Independent's Consumer	8-20-8 (225)	11.73	8.00	20.00	20.00	9.98	8.00	----
Independent's Standard	5-10-5 (220)	4.80	5.00	10.82	10.00	5.74	5.00	----
Independent's Standard	5-10-10 (232)	5.63	5.00	9.88	10.00	9.80	10.00	----
INTERNATIONAL MINERALS AND CHEMICAL CORPORATION Buffalo, N. Y.								
International Fertilizer	3-12-6 (444)	3.29	3.00	12.84	12.00	6.54	6.00	----
International Fertilizer	5-10-5 (445)	*4.61	5.00	11.48	10.00	5.02	5.00	----
KOLLER FERTILIZER COMPANY York, Pe.								
Kollers Atomic Poteto								
Phosphate	5-10-10 (49)	4.81	5.00	10.62	10.00	11.15	10.00	----
Kollers Elk Phosphate	3-12-6 (48)	2.84	3.00	12.86	12.00	6.96	6.00	----
Kollers Keystone Poteto								
Phosphate	4-12-8 (50)	3.85	4.00	12.70	12.00	8.60	8.00	----

* Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muirate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
LEBANON FERTILIZER WORKS, INC. Lebanon, Pa.									
Lavan's	3-12-6 (179)		3.11	3.00	12.52	12.00	7.20	6.00	----
Lavan's	4-12-8 (181)		4.34	4.00	13.08	12.00	8.44	8.00	----
Lavan's	5-10-5 (182)		5.05	5.00	11.18	10.00	5.38	5.00	----
Lavan's	5-10-10 (180)		5.33	5.00	11.08	10.00	10.22	10.00	----
FRED E. LORD, INC. Espy, Pa.									
Lord's	3-12-6 (284)		3.23	3.00	12.86	12.00	5.86	6.00	----
Lord's	4-12-8 (285)		4.25	4.00	12.46	12.00	8.02	8.00	----
Lord's	4-12-12 (287)		4.49	4.00	13.22	12.00	12.12	12.00	----
Lord's	5-10-5 (288)		4.66	5.00	11.40	10.00	6.87	5.00	----
Lord's	5-10-10 (286)		5.58	5.00	10.58	10.00	*9.64	10.00	----
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.									
Rich Yield	3-12-6 (21)		2.80	3.00	12.48	12.00	6.23	6.00	----
Rich Yield	4-12-4 (22)		3.83	4.00	12.00	12.00	4.04	4.00	----
Rich Yield	5-10-10 (23)		4.81	5.00	10.58	10.00	10.08	10.00	----
Rich Yield	10-10-10 (35)		11.03	10.00	*9.54	10.00	9.97	10.00	----
Trae Food	10-6-4 (34)		10.00	10.00	7.20	6.00	4.25	4.00	----
PENNSYLVANIA FARM BUREAU COOPERATIVE ASSN. Harrisburg, Pa.									
C.F.S.	3-12-6 (4)		3.21	3.00	12.38	12.00	6.16	6.00	----
C.F.S.	3-12-6 (26)		3.19	3.00	12.02	12.00	6.50	6.00	----
C.F.S.	3-12-6 (51)		3.16	3.00	13.00	12.00	5.80	6.00	----
C.F.S.	3-12-6 (99)		3.25	3.00	13.14	12.00	6.64	6.00	----
C.F.S.	3-12-6 (135)		3.21	3.00	13.30	12.00	6.04	6.00	----
C.F.S.	3-12-6 (190)		3.17	3.00	12.90	12.00	6.16	6.00	----
C.F.S.	3-12-6 (203)		3.40	3.00	12.76	12.00	6.10	6.00	----
C.F.S.	3-12-6 (317)		3.32	3.00	13.30	12.00	6.04	6.00	----
C.F.S.	3-12-6 (366)		3.59	3.00	13.26	12.00	8.26	6.00	----
C.F.S.	3-12-6 (498)		3.21	3.00	12.68	12.00	6.40	6.00	----
C.F.S.	3-12-6 (521)		3.17	3.00	12.84	12.00	5.90	6.00	----
C.F.S.	4-12-4 (3)		4.12	4.00	12.48	12.00	4.64	4.00	----
C.F.S.	4-12-4 (189)		4.14	4.00	12.98	12.00	4.58	4.00	----
C.F.S.	4-12-4 (318)		4.35	4.00	13.14	12.00	4.68	4.00	----
C.F.S.	4-12-4 (525)		4.13	4.00	12.44	12.00	4.47	4.00	----
C.F.S.	4-12-8 (25)		4.32	4.00	12.12	12.00	8.91	8.00	----
C.F.S.	4-12-8 (321)		4.36	4.00	13.00	12.00	8.86	8.00	----
C.F.S.	4-12-8 (524)		5.16	4.00	12.66	12.00	8.28	8.00	----
C.F.S.	4-12-12 (132)		4.25	4.00	12.66	12.00	12.31	12.00	----
C.F.S.	4-12-12 (320)		4.45	4.00	12.00	12.00	13.19	12.00	----
C.F.S.	5-10-5 (319)		5.20	5.00	10.94	10.00	5.54	5.00	----
C.F.S.	5-10-5 (364)		5.27	5.00	10.54	10.00	5.76	5.00	----
C.F.S.	5-10-5 (523)		5.07	5.00	10.62	10.00	5.50	5.00	----
C.F.S.	5-10-10 (2)		5.29	5.00	10.34	10.00	10.32	10.00	----
C.F.S.	5-10-10 (24)		5.06	5.00	10.84	10.00	10.40	10.00	----
C.F.S.	5-10-10 (52)		5.22	5.00	10.90	10.00	10.50	10.00	----
C.F.S.	5-10-10 (100)		5.23	5.00	10.14	10.00	10.22	10.00	----
C.F.S.	5-10-10 (133)		5.27	5.00	10.40	10.00	10.35	10.00	----
C.F.S.	5-10-10 (140)		5.16	5.00	11.20	10.00	10.62	10.00	----
C.F.S.	5-10-10 (205)		5.23	5.00	11.08	10.00	10.24	10.00	----
C.F.S.	5-10-10 (363)		5.00	5.00	11.26	10.00	10.17	10.00	----
C.F.S.	5-20-10 (102)		4.81	5.00	20.12	20.00	11.65	10.00	----
C.F.S.	5-20-10 (209)		5.52	5.00	19.82	20.00	11.65	10.00	----
C.F.S.	5-20-10 (496)		5.39	5.00	19.92	20.00	11.06	10.00	----
C.F.S.	8-16-16 (101)		*7.56	8.00	16.88	16.00	16.13	16.00	----
C.F.S.	8-16-16 (139)		7.84	8.00	16.00	16.00	15.84	16.00	----
C.F.S.	8-16-16 (522)		*7.00	8.00	16.32	16.00	15.85	16.00	----
C.F.S.	10-10-10 (1)		*8.95	10.00	10.64	10.00	10.29	10.00	----
C.F.S.	10-10-10 (219)		9.81	10.00	10.72	10.00	10.00	10.00	----
C.F.S.	10-10-10 (316)		*7.60	10.00	13.04	10.00	11.76	10.00	----
READING BONE FERTILIZER COMPANY Reading, Pa.									
Reading	3-12-6 (88)		2.84	3.00	12.14	12.00	6.30	6.00	----
Reading	3-12-6 (216)		2.83	3.00	12.84	12.00	6.65	6.00	----
Reading	4-12-4 (95)		*3.58	4.00	12.04	12.00	4.97	4.00	----
Reading	4-12-8 (93)		3.82	4.00	12.46	12.00	9.57	8.00	----
Reading	4-12-12 (87)		3.91	4.00	12.46	12.00	12.02	12.00	----
Reading	5-10-5 (97)		4.81	5.00	11.30	10.00	6.10	5.00	----
Reading	5-10-5 (218)		4.81	5.00	10.86	10.00	5.88	5.00	----
Reading	5-10-10 (96)		4.80	5.00	10.44	10.00	11.21	10.00	----
Reading	5-10-10 (214)		5.26	5.00	11.88	10.00	11.24	10.00	----
Reading	10-6-4 (90)		9.80	10.00	7.14	6.00	4.22	4.00	----
Reading	10-10-10 (94)		9.83	10.00	12.74	10.00	*9.58	10.00	----
ROBERT A. REICHARD, INC. Allentown, Pa.									
Reichard's Animal Base	3-12-6 (150)		3.36	3.00	13.10	12.00	6.56	6.00	----
Reichard's Animal Base	3-12-6 (166)		3.02	3.00	12.86	12.00	6.06	6.00	----
Reichard's Animal Base	5-10-5 (165)		5.01	5.00	10.80	10.00	6.14	6.00	----
Reichard's Animal Base	5-10-10 (118)		4.88	5.00	10.02	10.00	10.12	10.00	----
Reichard's Animal Base	5-10-10 (149)		5.00	5.00	10.32	10.00	10.81	10.00	----
Reichard's Animal Base	5-10-10 (164)		5.05	5.00	10.50	10.00	10.27	10.00	----

* Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muirate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
F. S. ROYSTER GUANO COMPANY Baltimore, Md.									
Royster Guano	3-12-6	(63)	3.09	3.00	12.30	12.00	6.25	6.00	----
Royster Guano	3-12-6	(199)	3.09	3.00	12.52	12.00	6.60	6.00	----
Royster Guano	3-12-6	(344)	3.27	3.00	13.04	12.00	6.35	6.00	----
Royster Guano	3-12-6	(351)	3.15	3.00	12.58	12.00	6.24	6.00	----
Royster Guano	3-12-6	(437)	3.24	3.00	13.04	12.00	6.04	6.00	----
Royster Guano	4-12-8	(200)	4.38	4.00	*11.42	12.00	8.92	8.00	----
Royster Guano	4-12-8	(436)	4.27	4.00	12.14	12.00	7.80	8.00	----
Royster Guano	5-10-5	(64)	5.13	5.00	*9.10	10.00	5.84	5.00	----
Royster Guano	5-10-5	(349)	5.11	5.00	10.56	10.00	5.10	5.00	----
Royster Guano	5-10-5	(435)	5.27	5.00	10.78	10.00	6.21	5.00	----
Royster Guano	5-10-5	(457)	5.11	5.00	10.08	10.00	5.08	5.00	----
Royster Guano	5-10-10	(61)	4.84	5.00	10.14	10.00	9.80	10.00	----
Royster Guano	5-10-10	(201)	5.18	5.00	10.70	10.00	10.57	10.00	----
Royster Guano	5-10-10	(352)	5.32	5.00	10.36	10.00	10.55	10.00	----
Royster Guano	5-10-10	(380)	5.09	5.00	11.00	10.00	10.11	10.00	----
Royster Guano	10-10-10	(381)	10.08	10.00	10.52	10.00	10.77	10.00	----
SEARS, ROEBUCK & COMPANY Chicago, Ill.									
Cross Country Plant Food	4-12-4	(263)	4.25	4.00	12.76	12.00	4.52	4.00	----
Cross Country Plant Food	5-10-5	(394)	5.05	5.00	11.04	10.00	5.64	5.00	----
CHARLES H. SEIBERT Myerstown, Pa.									
Grade No. 8	3-12-6	(184)	3.22	3.00	13.10	12.00	6.69	6.00	----
Grade No. 3	3-12-12	(185)	3.16	3.00	12.60	12.00	12.38	12.00	----
Grade No. 6	5-10-10	(183)	5.13	5.00	11.38	10.00	10.26	10.00	----
M. L. SHOEMAKER DIVISION OF WILSON & COMPANY, INC. Philadelphia, Pa.									
M. L. Shoemaker's									
"Swift Sure"	3-12-6	(226)	3.45	3.00	13.60	12.00	5.82	6.00	----
"Swift Sure"	5-10-5	(239)	5.27	5.00	10.82	10.00	5.13	5.00	----
"Swift Sure"	5-10-10	(238)	5.24	5.00	11.12	10.00	*9.50	10.00	----
SUMMERS FERTILIZER COMPANY, INC. Baltimore, Md.									
"Summers" Best-On-Earth	3-12-6	(530)	3.19	3.00	12.02	12.00	6.26	6.00	----
"Summers" Best-On-Earth	5-10-10	(531)	5.24	5.00	10.20	10.00	9.98	10.00	----
SWACK FERTILIZER COMPANY DuBois, Pa.									
Swack's	3-12-6	(309)	3.10	3.00	13.36	12.00	6.11	6.00	----
Swack's	3-12-6	(359)	2.82	3.00	12.68	12.00	6.22	6.00	----
Swack's	3-12-6	(512)	3.02	3.00	12.84	12.00	6.34	6.00	----
Swack's	4-12-8	(306)	4.17	4.00	12.70	12.00	8.40	8.00	----
Swack's	4-12-8	(361)	4.09	4.00	12.70	12.00	8.36	8.00	----
Swack's	5-10-5	(307)	5.20	5.00	11.66	10.00	5.86	5.00	----
Swack's	5-10-5	(358)	5.06	5.00	10.34	10.00	5.04	5.00	----
Swack's	5-10-10	(308)	5.06	5.00	10.58	10.00	11.12	10.00	----
Swack's	5-10-10	(510)	5.01	5.00	11.24	10.00	*9.65	10.00	----
SWIFT & COMPANY PLANT FOOD DIVISION Baltimore, Md.									
Blenn	3-12-6	(74)	3.03	3.00	12.32	12.00	6.41	6.00	----
Brimm	5-10-10	(42)	4.81	5.00	10.54	10.00	10.20	10.00	----
Brimm	5-10-10	(75)	4.88	5.00	10.74	10.00	10.49	10.00	----
Brimm	5-10-10	(167)	4.81	5.00	10.90	10.00	9.83	10.00	----
Brimm	5-10-10	(357)	5.05	5.00	10.38	10.00	10.27	10.00	----
Brimm	5-10-10	(395)	5.38	5.00	10.26	10.00	11.48	10.00	----
Swift's Red Steer	3-12-6	(41)	3.01	3.00	12.40	12.00	6.22	6.00	----
Swift's Red Steer	3-12-6	(73)	3.13	3.00	12.06	12.00	6.11	6.00	----
Swift's Red Steer	3-12-6	(168)	3.16	3.00	12.62	12.00	6.02	6.00	----
Swift's Red Steer	3-12-6	(217)	3.12	3.00	12.66	12.00	6.30	6.00	----
Swift's Red Steer	3-12-6	(331)	3.17	3.00	12.28	12.00	6.46	6.00	----
Swift's Red Steer	3-12-6	(401)	3.09	3.00	12.22	12.00	6.36	6.00	----
Swift's Red Steer	3-12-6	(535)	3.14	3.00	11.82	12.00	6.20	6.00	----
Swift's Red Steer	4-12-4	(169)	4.02	4.00	12.12	12.00	4.24	4.00	----
Swift's Red Steer	4-12-4	(449)	4.02	4.00	12.46	12.00	4.71	4.00	----
Swift's Red Steer	4-12-4	(534)	4.01	4.00	11.98	12.00	4.38	4.00	----
Swift's Red Steer	4-12-8	(468)	4.11	4.00	12.44	12.00	9.30	8.00	----
Swift's Red Steer	5-10-5	(171)	5.36	5.00	10.02	10.00	5.89	5.00	----
Swift's Red Steer	5-10-5	(373)	5.32	5.00	10.26	10.00	5.49	5.00	----
Swift's Red Steer	5-10-5	(469)	4.85	5.00	10.68	10.00	5.41	5.00	----
Swift's Red Steer	5-10-5	(533)	5.23	5.00	10.06	10.00	5.61	5.00	----
Swift's Red Steer	5-10-10	(72)	4.80	5.00	10.46	10.00	9.82	10.00	----
Swift's Red Steer	5-10-10	(470)	4.82	5.00	10.38	10.00	*9.51	10.00	----
Swift's Red Steer	5-10-10	(532)	4.81	5.00	10.36	10.00	9.66	10.00	----
Vigoro	4-12-4	(76)	4.02	4.00	12.04	12.00	4.42	4.00	----
Vigoro	4-12-4	(172)	3.84	4.00	12.36	12.00	4.14	4.00	----
Vigoro	4-12-4	(261)	3.87	4.00	12.60	12.00	4.26	4.00	----
Vigoro	4-12-4	(390)	4.01	4.00	12.38	12.00	4.52	4.00	----
Vigoro	5-10-5	(473)	5.07	5.00	10.20	10.00	5.39	5.00	----
Vigoro	6-10-4	(279)	6.12	6.00	10.14	10.00	3.98	4.00	----
Vigoro Commercial Grower	5-10-5	(396)	4.80	5.00	10.54	10.00	5.62	5.00	----
Vigoro Commercial Grower	7-7-7	(40)	*6.28	7.00	8.88	7.00	*6.36	7.00	----
Vigoro Commercial Grower	8-8-8	(280)	*7.48	8.00	8.52	8.00	8.21	8.00	----

* Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muirate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
I. P. THOMAS & SON COMPANY Camden, N. J.									
I. P. Thomas	5-10-5	(377)	5.06	5.00	10.34	10.00	4.87	5.00	----
I. P. Thomas	5-10-5	(413)	5.25	5.00	11.46	10.00	5.08	5.00	----
I. P. Thomas	5-10-10	(376)	5.10	5.00	10.72	10.00	10.12	10.00	----
Tip Top Fertilizer	3-12-6	(378)	3.04	3.00	12.52	12.00	6.14	6.00	----
Tip Top Fertilizer	3-12-6	(414)	3.42	3.00	12.20	12.00	6.31	6.00	----
TRENTON BONE FERTILIZER COMPANY Trenton, N. J.									
Trenton	3-12-6	(81)	3.01	3.00	12.74	12.00	6.54	6.00	----
Trenton	6-12-6	(80)	6.29	6.00	12.64	12.00	6.03	6.00	----
F. W. TUNNELL & COMPANY, INC. Philadelphia, Pa.									
Tunnell's Fertilizer	3-12-6	(79)	3.44	3.00	12.40	12.00	6.66	6.00	----
Tunnell's Fertilizer	3-12-6	(159)	3.02	3.00	12.92	12.00	5.96	6.00	----
Tunnell's Fertilizer	3-12-6	(229)	3.23	3.00	13.06	12.00	6.42	6.00	----
Tunnell's Fertilizer	4-12-8	(156)	4.01	4.00	12.70	12.00	8.49	8.00	----
Tunnell's Fertilizer	4-12-8	(174)	4.00	4.00	12.54	12.00	7.87	8.00	----
Tunnell's Fertilizer	5-10-5	(78)	4.90	5.00	10.46	10.00	5.24	5.00	----
Tunnell's Fertilizer	5-10-5	(227)	5.15	5.00	11.14	10.00	5.28	5.00	----
Tunnell's Fertilizer	5-10-10	(77)	5.03	5.00	10.08	10.00	*8.74	10.00	----
Tunnell's Fertilizer	5-10-10	(155)	5.03	5.00	11.10	10.00	10.15	10.00	----
Tunnell's Fertilizer	5-10-10	(173)	5.08	5.00	10.56	10.00	10.33	10.00	----
Tunnell's Fertilizer	5-10-10	(228)	5.00	5.00	10.58	10.00	10.41	10.00	----
Tunnell's Fertilizer	5-10-10	(397)	5.21	5.00	10.04	10.00	11.00	10.00	----
Tunnell's Fertilizer	7-7-7	(231)	7.04	7.00	8.06	7.00	7.58	7.00	----
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.									
V-C Fertilizer	3-12-6	(56)	3.02	3.00	12.46	12.00	6.43	6.00	----
V-C Fertilizer	3-12-6	(347)	2.87	3.00	13.30	12.00	5.82	6.00	----
V-C Fertilizer	3-12-6	(372)	3.01	3.00	13.52	12.00	6.26	6.00	----
V-C Fertilizer	3-12-6	(434)	3.27	3.00	12.16	12.00	6.79	6.00	----
V-C Fertilizer	3-12-6	(464)	3.08	3.00	12.34	12.00	6.16	6.00	----
V-C Fertilizer	3-12-6	(480)	3.21	3.00	12.74	12.00	6.68	6.00	----
V-C Fertilizer	4-12-4	(59)	4.04	4.00	12.30	12.00	4.19	4.00	----
V-C Fertilizer	4-12-4	(466)	4.01	4.00	12.82	12.00	4.25	4.00	----
V-C Fertilizer	4-12-4	(481)	4.07	4.00	12.66	12.00	4.26	4.00	----
V-C Fertilizer	4-12-8	(60)	3.81	4.00	12.92	12.00	*7.51	8.00	----
V-C Fertilizer	4-12-12	(465)	3.86	4.00	13.68	12.00	12.79	12.00	----
V-C Fertilizer	5-10-5	(57)	4.96	5.00	10.62	10.00	5.95	5.00	----
V-C Fertilizer	5-10-5	(371)	5.06	5.00	10.90	10.00	5.24	5.00	----
V-C Fertilizer	5-10-5	(433)	5.14	5.00	11.46	10.00	5.33	5.00	----
V-C Fertilizer	5-10-5	(446)	5.01	5.00	10.42	10.00	5.19	5.00	----
V-C Fertilizer	5-10-5	(482)	4.90	5.00	10.28	10.00	5.45	5.00	----
V-C Fertilizer	5-10-10	(55)	4.88	5.00	10.54	10.00	10.61	10.00	----
V-C Fertilizer	5-10-10	(447)	5.06	5.00	10.66	10.00	10.85	10.00	----
V-C Fertilizer	5-10-10	(543)	5.29	5.00	10.70	10.00	10.36	10.00	----

* Deficient

TABLE IV. GROUND BONE FERTILIZERS—FURNISHING NITROGEN AND PHOSPHORIC ACID

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MANUFACTURER AND BRAND NAME		NITROGEN		PHOSPHORIC ACID	
		Found	Guar.	Found	Guar.
		P. ct.	P. ct.	P. ct.	P. ct.
GOULARD & OLENA, INC. Skillman, N. J.					
G & O Ground Bone Fertilizer	(40+)	3.89	2.40	*19.20	20.00
INDEPENDENT MANUFACTURING COMPANY Philadelphia, Pa.					
Independent's Raw Bone Meal	(236)	3.88	3.70	20.80	20.50
Independent's Steamed Bone Meal	(224)	2.48	2.47	24.30	23.00
F. S. ROYSTER GUANO COMPANY Baltimore, Md.					
Royster Fine Ground Bone Meal	(38+)	2.81	2.47	25.30	22.90
SEARS, ROEBUCK & COMPANY Chicago, Ill.					
Cross Country Bone Meal	(393)	2.44	2.00	20.0+	20.00

* Deficient

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.						
Normal Superphosphate 18%	(33)		18.62	18.00		
Normal Superphosphate 18%	(70)		18.38	18.00		
Normal Superphosphate 18%	(148)		18.48	18.00		
Normal Superphosphate 18%	(265)		19.32	18.00		
Normal Superphosphate 18%	(291)		19.72	18.00		
Normal Superphosphate 18%	(339)		19.38	18.00		
Normal Superphosphate 18%	(455)		18.66	18.00		
Normal Superphosphate 18%	(479)		18.38	18.00		
ARMOUR FERTILIZER WORKS Baltimore, Md.						
Armour's Big Crop Superphosphate 20%	(29)		20.70	20.00		
Armour's Big Crop Superphosphate 20%	(162)		21.32	20.00		
Armour's Big Crop Superphosphate 20%	(196)		21.26	20.00		
Armour's Big Crop Superphosphate 20%	(417)		20.28	20.00		
Armour's Big Crop Superphosphate 20%	(501)		20.24	20.00		
Armour's Big Crop Superphosphate 20%	(542)		21.44	20.00		
BAUGH & SONS COMPANY Philadelphia, Pa.						
Baugh's Granular Superphosphate 20%	(158)		20.98	20.00		
Baugh's Superphosphate 20%	(108)		20.32	20.00		
Baugh's Superphosphate 20%	(246)		20.88	20.00		
Baugh's Superphosphate 20%	(302)		21.24	20.00		
CARLISLE FERTILIZER WORKS, INC. Carlisle, Pa.						
Carlisle Superphosphate 20%	(324)		20.90	20.00		
CENTRAL CHEMICAL CORPORATION Hagerstown, Md.						
Farmrite Famous Farmphos 20%	(46)		20.54	20.00		
Farmrite Famous Farmphos 20%	(292)		21.76	20.00		
Farmrite Famous Farmphos 20%	(493)		20.18	20.00		
Farmrite Superphosphate 20%	(400)		22.06	20.00		
CUMBERLAND VALLEY COOPERATIVE ASSN. Shippensburg, Pa.						
Old Reliable Superphosphate 20%	(43)		20.34	20.00		
Old Reliable Superphosphate 20%	(333)		21.12	20.00		
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.						
Davison Superphosphate 20%	(31)		20.44	20.00		
Davison Superphosphate 20%	(37)		20.48	20.00		
Davison Superphosphate 20%	(538)		20.78	20.00		
Davco Granulated Superphosphate 20%	(82)		20.36	20.00		
Davco Granulated Superphosphate 20%	(194)		21.62	20.00		
Davco Granulated Superphosphate 20%	(259)		21.42	20.00		
Davco Granulated Superphosphate 20%	(355)		20.88	20.00		
Davco Granulated Superphosphate 20%	(486)		20.72	20.00		
Davco Granulated Superphosphate 20%	(508)		21.06	20.00		
Davco Granulated Superphosphate 20%	(537)		20.34	20.00		
EASTERN STATES FARMERS' EXCHANGE INCORPORATED West Springfield, Mass.						
Eastern States Superphosphate Granulated 20%	(18)		21.02	20.00		
Eastern States Superphosphate Granulated 20%	(211)		21.72	20.00		
Eastern States Superphosphate Granulated 20%	(520)		21.30	20.00		
G.L.F. SOIL BUILDING SERVICE Ithaca, N. Y.						
G.L.F. Quality Superphosphate 20%	(385)		20.86	20.00		
G.L.F. Quality Superphosphate 20%	(412)		21.16	20.00		
GRIFFITH & BOYD COMPANY Baltimore, Md.						
Griffith & Boyd's Superphosphate 20%	(252)		21.32	20.00		
Griffith & Boyd's Superphosphate 20%	(432)		20.90	20.00		
INDEPENDENT MANUFACTURING COMPANY Philadelphia, Pa.						
Independent's Superphosphate 20%	(235)		20.82	20.00		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

200-4-40

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MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
INTERNATIONAL MINERALS AND CHEMICAL CORPORATION Buffalo, N. Y.						
International Superphosphate 20% (454)			20.20	20.00		
MATHIESON CHEMICAL CORPORATION Baltimore, Md.						
C.F.D. Superphosphate 20% (420)			21.28	20.00		
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.						
Superphosphate 20% (36)			21.42	20.00		
PENNSYLVANIA FARM BUREAU COOPERATIVE ASSN. Harrisburg, Pa.						
C.F.S. Superphosphate 20% (6)			20.56	20.00		
C.F.S. Superphosphate 20% (98)			21.32	20.00		
C.F.S. Superphosphate 20% (497)			20.60	20.00		
C.F.S. Superphosphate 20% (527)			20.84	20.00		
C.F.S. Superphosphate Granulated 20% (134)			20.96	20.00		
C.F.S. Superphosphate Granulated 20% (204)			21.60	20.00		
C.F.S. Superphosphate Granulated 20% (365)			21.08	20.00		
READING BONE FERTILIZER COMPANY Reading, Pa.						
Superphosphate 20% (89)			19.91	20.00		
ROBERT A. REICHARD, INC. Allentown, Pa.						
Reichard's Famous Superphosphate 20% (163)			20.96	20.00		
F. S. ROYSTER GUANO COMPANY Baltimore, Md.						
Royster Superphosphate 20% (350)			21.12	20.00		
SUMMERS FERTILIZER COMPANY, INC. Baltimore, Md.						
"Summers" Best-On-Earth Superphosphate 20% (529)			21.08	20.00		
SWACK FERTILIZER COMPANY DuBois, Pa.						
Swack's Superphosphate 20% (362)			21.02	20.00		
SWIFT & COMPANY PLANT FOOD DIVISION Baltimore, Md.						
Swift's Red Steer Superphosphate 20% (170)			21.08	20.00		
I. P. THOMAS & SON COMPANY Camden, N. J.						
Superphosphate 20% (12)			20.64	20.00		
Superphosphate 20% (415)			21.70	20.00		
F. W. TUNNELL & COMPANY, INC. Philadelphia, Pa.						
Tunnell's Superphosphate 20% (154)			20.28	20.00		
Tunnell's Superphosphate 20% (230)			20.32	20.00		

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE AMERICAN AGRICULTURAL CHEMICAL COMPANY New York, N. Y.					
AA Quality Fertilizer	0-14-7 (125)	14.48	14.00	7.22	7.00
Agrico Phosphata & Potash	0-14-7 (273)	15.08	14.00	7.12	7.00
BAUGH & SONS COMPANY Philadelphia, Pa.					
Baugh's Phosphata & Potash					
Mixture	0-12-12 (153)	12.80	12.00	13.14	12.00
Baugh's Phosphata & Potash					
Mixture	0-14-7 (114)	14.46	14.00	7.69	7.00
Baugh's Phosphata & Potash					
Mixture	0-14-7 (245)	15.88	14.00	8.13	7.00
Baugh's Phosphata & Potash					
Mixture with Borax	0-14-7 (146)	15.08	14.00	6.98	7.00
CENTRAL CHEMICAL CORPORATION Hagerstown, Md.					
Farmrita Famous Alfalfa Food	0-14-7 (38)	14.44	14.00	7.42	7.00
Farmrita Fertilizer	0-14-7 (294)	15.08	14.00	7.37	7.00
Farmrita Fertilizer	0-14-7 (490)	14.28	14.00	7.57	7.00
CUMBERLAND VALLEY COOPERATIVE ASSN. Shippensburg, Pa.					
Old Reliable	0-14-7 (334)	14.98	14.00	7.91	7.00
DAVISON CHEMICAL CORPORATION Baltimore, Md.					
Davco Granulated Fertilizer	0-14-7 (260)	14.86	14.00	7.48	7.00
Davco Granulated Fertilizer	0-20-20 (505)	*17.76	20.00	22.22	20.00
EASTERN STATES FARMERS' EXCHANGE INCORPORATED West Springfield, Mass.					
Eastern States	0-20-20 (16)	20.16	20.00	21.56	20.00
Eastern States	0-20-20 (54)	20.08	20.00	21.40	20.00
Eastern States	0-20-20 (143)	21.62	20.00	*19.44	20.00
Eastern States	0-20-20 (213)	*18.62	20.00	20.40	20.00
Eastern States	0-20-20 (425)	*19.42	20.00	21.62	20.00
Eastern States	0-20-20 (518)	*19.38	20.00	20.86	20.00
Eastern States with 5% Borax	0-19-19 (17)	19.04	19.00	19.46	19.00
Eastern States with 5% Borax	0-19-19 (144)	20.52	19.00	*18.54	19.00
Eastern States with 5% Borax	0-19-19 (301)	19.16	19.00	20.14	19.00
Eastern States with 5% Borax	0-19-19 (519)	*18.68	19.00	20.02	19.00
G.L.F. SOIL BUILDING SERVICE Ithaca, N. Y.					
G.L.F. Quality Open Formula	0-20-20 (388)	20.38	20.00	*19.58	20.00
G.L.F. Quality Open Formula	0-20-20 (410)	20.08	20.00	22.80	20.00
GRIFFITH & BOYD COMPANY Baltimore, Md.					
Griffith & Boyd's Special					
Grain Grower	0-14-7	14.72	14.00	6.93	7.00
FRED E. LORD, INC. Espy, Pa.					
Lord's	0-14-7 (289)	14.64	14.00	7.73	7.00
PENNSYLVANIA FARM BUREAU COOPERATIVE ASSN. Harrisburg, Pa.					
C.F.S.	0-14-7 (5)	14.78	14.00	7.60	7.00
C.F.S.	0-20-20 (526)	*18.64	20.00	20.86	20.00
C.F.S. with Borax	0-19-19 (141)	18.98	19.00	19.69	19.00
C.F.S. with Borax	0-19-19 (210)	19.82	19.00	19.89	19.00
READING BONE FERTILIZER COMPANY Reading, Pa.					
Reading	0-12-12 (86)	12.80	12.00	*9.86	12.00
Reading	0-12-12 (215)	12.74	12.00	13.65	12.00
Reading	0-14-7 (91)	14.86	14.00	6.93	7.00
Reading	0-20-20 (92)	*18.92	20.00	*19.25	20.00
F. S. ROYSTER GUANO COMPANY Baltimore, Md.					
Roystar Phosphata & Potash	0-12-12 (62)	13.04	12.00	13.03	12.00
Roystar Phosphata & Potash	0-14-7 (202)	15.54	14.00	*6.38	7.00
SWACK FERTILIZER COMPANY DuBois, Pa.					
Swack's	0-14-7 (360)	14.42	14.00	7.19	7.00
Swack's	0-20-20 (511)	*18.70	20.00	21.48	20.00

* Deficient

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
SWIFT & COMPANY PLANT FOOD DIVISION Baltimore, Md.					
Swift's Red Steer 0-14-7 (536)	14.30	14.00	7.49	7.00	----
I. P. THOMAS & SON COMPANY Camden, N. J.					
I. P. Thomas 0-20-20 (7)	*19.64	20.00	*17.94	20.00	----
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.					
V-C Fertilizer 0-12-12 (58)	12.88	12.00	*11.69	12.00	----
* Deficient					

TABLE VII. MISCELLANEOUS FERTILIZERS

MANUFACTURER AND BRAND NAME		NITROGEN		PHOSPHORIC ACID			
		Found	Guar.	Total		Available	
				Found	P. ct.	Found	P. ct.
Agrinite	THE AMERICAN AGRICULTURAL CHEMICAL COMPANY New York, N. Y.	(343)					
	AMERICAN CYANAMID COMPANY New York, N. Y.		8.25				
	Aero Cyanamid, Granular	(11)					
	Aero Cyanamid, Granular	(399)	20.74		20.60		
	Aeroprills Ammonium Nitrate, Fertilizer	(30)	20.70		20.60		
Arcadian the American Nitrate of Soda	Aeroprills Ammonium Nitrate, Fertilizer	(402)	33.55		33.50		
	Aeroprills Ammonium Nitrate, Fertilizer	(456)	33.50		33.50		
	THE BARRETT DIVISION ALLIED CHEMICAL & DYE CORPORATION New York, N. Y.		33.82		33.50		
	CHILEAN NITRATE SALES CORPORATION New York, N. Y.	(348)	16.18		16.00		
	Chilean Nitrate of Soda - Champion Brand	(406)	16.02		16.00		
Independent's Tankege	INDEPENDENT MANUFACTURING COMPANY Philadelphia, Pa.		7.81		7.00		
	THE SEWERAGE COMMISSION Milwaukee, Wis.						
	Milorganite	(254)					
	Milorganite	(312)	6.04		6.00	2.66	2.00
	Milorganite	(458)	5.86		6.00	2.50	2.00
* Deficient						2.76	2.00